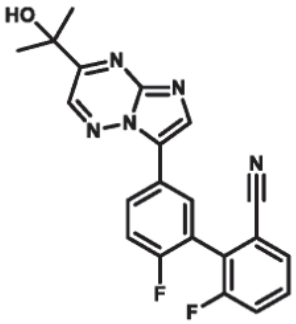
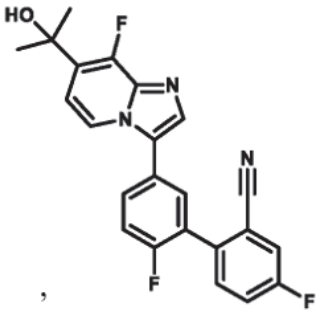
In certain embodiments, a compound according to the first subaspect for use in the treatment of itch in an animal is provided.

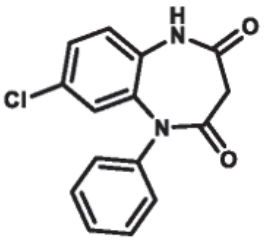
In another aspect of the invention, a positive allosteric α2 or α3 $GABA_A$ receptor modulator for use in the treatment of itch is provided.

In another aspect of the invention, a positive allosteric α2 or α3 $GABA_A$ receptor modulator according to the first aspect of the invention for use in the treatment of itch is provided.

In another aspect of the invention, there is provided a pharmaceutical composition comprising a compound selected from the following:



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and


,

wherein the compound is in the form of a suspension in a solution of 0.9% saline/1% Tween80, and wherein said pharmaceutical composition is formulated to provide a dose of between 0.01 mg/kg and 30 mg/kg when administered to the subject.

In another aspect of the invention, there is provided the pharmaceutical composition as described herein for use in therapy.

In another aspect of the invention, there is provided a use of the pharmaceutical composition as described herein in the manufacture of a medicament for treating itch in a subject, wherein the itch is not treatable with an antihistamine.

Wherever alternatives for single separable features such as, for example, a functional group, are laid out herein as "embodiments", it is to be understood that such alternatives may be combined freely to form discrete embodiments of the invention disclosed herein.
The invention is further illustrated by the following examples and figures, from which further embodiments and advantages can be drawn. These examples are meant to illustrate the invention but not to limit its scope.

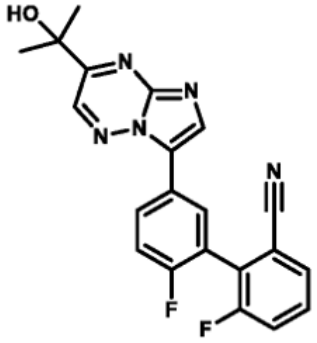
Short description of the figures

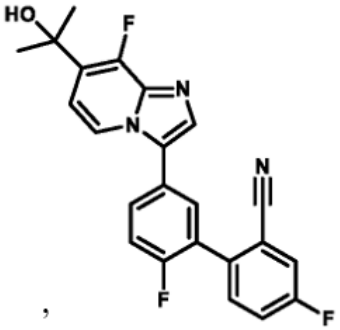
Fig. 1 shows antipruritic effects by per oral diazepam (DZP in $GABA_AR$ point- mutated mice of the 129X1/SvJ genetic background. DZP reduces number of scratching bouts elicited by cheek injection of 20 µg α-Me-5HT in $GABA_AR$ triple point mutated mice, targeting α2, α3 or α5 in isolation. DZP was administered 1 h before α-Me-5HT injection. Time course (a): data points are mean±s.e.m., and statistical analysis of elicited scratching bouts directed at the ipsilateral cheek (b), quantified for 20 minutes. $^{***}P<0.001$;$^{*}P<0.05$ versus vehicle treated mice (AN OVA followed by Bonferroni's post hoc test, $F(5,44)=8.5$). RHRR, RRHR, and RRRH mice are mice, in which all DZP- sensitive a subunits have been rendered DZP insensitive except for α2, α3, or α5, respectively. DZP insensitivity was introduced through histidine to arginine aminoacid exchanges at positions 101 for α1 and α2, 126 for α3, and 105 for α5. Number of mice (vehicle/DZP treated): RHRR n=8/10, RRHR n=8/8 and RRRH n=7/9, respectively. RHRR: α2 only, RRHR: α3 only, RRRH: α5 only.

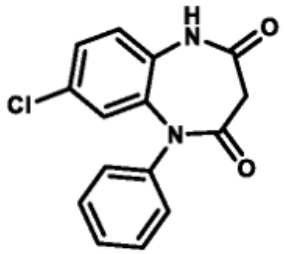
Fig.2 shows dose-dependent antipruritic effects of oral DZP against itch induced by intradermal injection of 20 µg α-Me-5HT in mice of the 129X1/SvJ genetic background. DZP was given 1 h before α-Me-5HT injection, (a) Time course data points are mean±s.e.m., and statistical analysis of elicited scratching bouts directed at the ipsilateral cheek quantified for 30 min; $^{*}P<0.05$ versus vehicle treated mice (ANOVA followed by Dunnett's post hoc test, $F(6, 37)=6$. Number of mice: n=7, 7, 4, 6, 6, 7 and 6 for vehicle, 0.1, 0.3, 1 , 3, 10 and 30 mg/kg, respectively, (b) dose-dependence of the antipruritic effects of

Claims

1. A pharmaceutical composition comprising a compound selected from the following:



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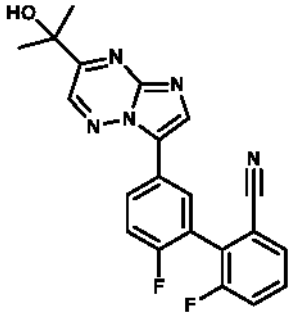
and


,

wherein the compound is in the form of a suspension in a solution of 0.9% saline/1% Tween80, and wherein said pharmaceutical composition is formulated to provide a dose of between 0.01 mg/kg and 30 mg/kg when administered to the subject.

2. The pharmaceutical composition of claim 1, wherein the suspension comprises polysorbate 80.

3. The pharmaceutical composition of claim 1, wherein the compound is:



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4. Use of the pharmaceutical composition according to any one of claims 1 to 3 in the manufacture of a medicament for treating itch in a subject, wherein the itch is not treatable with an antihistamine.

5. The use of claim 4, wherein the itch is associated with kidney disease, liver disease, or treatment with opioids.

6. The use of claims 4 or 5, wherein the medicament is to be administered at a dose of from about 0.01 mg/kg per day to about 10 mg/kg per day of a body weight of a dog.

7. The pharmaceutical composition according to any one of claims 1 to 3 for use in therapy.